

## REMARKS

In response to the Office Action mailed on August 29, 2006 Applicant respectfully requests reconsideration based on the above specification and claim amendments and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

First, Applicant wishes to thank Examiner Unelus and Supervisory Examiner Fleming for the telephone conference on November 16, 2006 in which Examiner Unelus and Supervisory Examiner Fleming kindly explained their perspectives on the Office Action. The prior art references and a proposed amended Claim 62 were discussed. The Examiner's use of Burd "Systems Architecture", referring to an independent software "process" as a "processor" was addressed. Claim 62 has been amended to further clarify "functionally independent of". Reaffirming the statements of Examiner Unelus and Supervisory Examiner Fleming in the telephone conference, the following remark in the Office Action under the 35 U.S.C. 103 rejection referencing Wong et al. and Suzaki has been disregarding as a copy/paste error, and therefore is not addressed in the instant response: "Therefore, it would have been obvious to combine Wong et al. (US 2004/0111443) with Suzaki (US 2004/0078636) for the benefit of creating a computer system to obtain the invention as specified in claims 62, 69, and 70." In light of the telephone conference and in compliance with 37 C.F.R. 1.133(b), the above specification and claim amendments and remarks are respectfully submitted.

Claims 1 – 70 are pending in the instant application. Claims 1 – 46 have been withdrawn under 37 C.F.R. 1.142(b) pursuant to a restriction requirement. Claims 47 – 61 and 67 have been cancelled. Claims 62 – 66 and 68 – 70 have been amended and new Claims 71 – 74 have been added, leaving Claims 62 – 66 and 68 – 74 for consideration upon the entry of the present amendment. Withdrawn Claims 1 – 20 and 37 – 46 have been amended consistent with Claims 62 – 66 and 68 – 74, and are deemed ready for allowance should the Examiner remove the restriction requirement. No new matter has been entered.

### **Specification Amendments**

The amendments to the specification of paragraphs starting on pages 3, 4, 30, 33, 43, and 48 are considered fully responsive to the Examiner's objections to the specification. No new matter has been added.

Although the Examiner stated that the oath/declaration was acceptable, the Examiner requested a supplementary oath/declaration based upon un-initialed alterations that were included as part of the originally filed specification. Initialing and dating of alterations is permissive under 37 C.F.R. 1.52(c), as indicated by the plain language "should be dated and initialed", so long as alterations are made before signing the oath/declaration. A supplementary oath/declaration is not required in this instance, because the alterations were made before signing the accompanying oath/declaration.

### **Support for Claim Amendments**

Support for the features of amended Claims 62 – 66, 68, and 69 may be found, for example, on pages 30 – 37 and FIGs. 8 – 10 of the specification (e.g., API buffer 20). Further support for "physically separate" in amended Claims 62 and 69 may be found, for example, on pages 39 – 40 and FIG. 14 of the specification. Support for the features of amended Claim 70 may be found, for example, on pages 40 – 44 and FIGs. 15 and 16 of the specification (e.g., system security 6, routing function 104, interrogator and filter 103), as well as other disclosures within the specification, such as FIGs. 8 – 10. Support for the features of new Claims 71 – 74 may be found, for example, at pages 40 – 44 and FIGs. 15 and 16 of the specification. Further support for the features of new Claims 71 – 74 may be found, for example, on pages 30 – 37 and FIGs. 8 – 10. Support for "electrically isolated" of Claim 72 and further support for "physically separate" of Claim 71 may be found, for example, on pages 39 – 40 and FIG. 14 of the specification. No new matter has been added by the amendments.

### **Claim Rejections Under - 35 USC § 101**

Claims 62-70 stand rejected under 35 U.S.C. 101 as allegedly lacking utility. The Examiner asserts that it is unclear how a computer system would be operable with the described levels of operation and functional independence of resources. Claims 62 – 70 also stand rejected under 35 U.S.C. 101 because the claimed invention is allegedly directed to non-statutory subject matter, including both an apparatus and a method within the same claims. As discussed in the telephone conference and further detailed herein, Claims 62 – 66 and 68 – 70 as amended meet the requirements of 35 U.S.C. 101, and therefore the rejections are respectfully traversed.

Claim 62, as amended, recites *inter alia* “wherein said controller and resource management system is implemented in electronic hardware that is physically separate and functionally independent of said processor” (emphasis added). Claim 62, as amended, further recites “a manager and scheduler function for managing and scheduling a plurality of processes performed by said processor.” Claim 62, as amended, also recites “a plurality of computer input/output interfaces for coupling said controller and resource management system to said plurality of computer resources, including a computer input/output interface for communicatively coupling control messages to said processor” (emphasis added). Claim 62, as amended, additionally recites “a plurality of buffers for buffering data coupled to said plurality of computer input/output interfaces, including an application program interface (API) buffer for communicatively coupling control messages to said processor”(emphasis added). The elements of Claim 62, as amended, are described in the specification, for example, in reference to FIGs. 8 – 10 et seq. and the associated text, including pages 30 – 37.

Claims 63 – 66 and 68 depend from Claim 62. Claim 69, as amended, recites similar elements for a personal computer as recited in Claim 62. Therefore, Claims 62 – 66, 68, and 69, as amended, recite operational elements with utility in compliance with 35 U.S.C. 101. Claim 70, as amended, recites *inter alia* “A method for controlling and managing a plurality of computer resources, including a processor, and handling a plurality of computer events such that said method is functionally independent of said processor”. The elements of Claim 70, as amended, are described in the specification, for example, in reference to FIGs. 15 – 16 et seq. and

the associated text, including pages 40 – 44.

"To violate [35 U.S.C.] 101 the claimed device must be totally incapable of achieving a useful result." *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1571, 24 USPQ2d 1401, 1412 (Fed. Cir. 1992) (emphasis added). It is clear that Claims 62 – 66 and 68 – 70, as amended, disclose inventions capable of achieving useful results. Claims 62 – 66 and 68 – 70, as amended, are not directed to non-statutory subject matter; therefore, for at least these reasons, Claims 62 – 66 and 68 – 70, as amended, should be allowed.

#### **Claim Rejection Under - 35 USC § 112**

The Examiner repeats similar grounds for rejection of Claims 62-70 under 35 U.S.C. 101 for rejections under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement and the enablement requirement. The same line of reasoning is also used by the Examiner for a rejection under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

If a statement of utility in the specification contains within it a connotation of how to use the invention, 35 U.S.C. 112 is satisfied. *In re Johnson*, 282 F.2d 370, 373, 127 USPQ 216, 219 (CCPA 1960); *In re Hitchings*, 342 F.2d 80, 87, 144 USPQ 637, 643 (CCPA 1965). See also *In re Brana*, 51 F.2d 1560, 1566, 34 USPQ2d 1437, 1441 (Fed. Cir. 1993). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). As long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. 112 is satisfied. *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970). A claim may not be rejected solely because of the

type of language used to define the subject matter for which patent protection is sought. *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971).

Claims 62 – 66 and 68 –70, as amended, have adequate support in the specification and therefore comply with the requirements of 35 U.S.C. 112, first and second paragraphs. For example, in reference to FIG. 9 at pages 34 – 35, the specification states:

“The present invention controller and resource management system is now able to independently control the processor in-band of the API path as shown by 40, or alternately out-of-band using the secure interrupts 100. The processor is therefore dependent on the present invention controller and resource management system for its functional operation.”

A further example, in reference to FIG. 10 at page 36 - 37, states:

“[The] processing function 43 comprised of processor 15 and local processor memory 14 are operatively and communicably coupled to the present invention 85 through bidirectional interface 40 and secure interrupts 100. The processor is required to use this path for downloading new code, booting and communicating with the remaining functions and resources of the computer system. ... Computer system events 71 will prompt communication between the present invention and the processor through bidirectional interface 40 or secure interrupts 100. Data path 40 is used for both data and in-band messaging by both the processor and present invention. The processor will execute an API call to the present invention as it does for prior art computer systems when the API buffer memory is located in internal or local memory space. The present invention will respond to the processors request for service based on a prioritized scheduling algorithm executing in 19. ... The present invention controller and resource management system treats the processor just like any other resource in the computer system; the processor is no longer in control of the situation.”

Support for other elements, such as in Claim 68, as amended, which recites “wherein said controller and resource management system is electrically isolated from said plurality of

computer resources, including at least said processor” can also be located within the specification. For example, see FIG. 14 and text on pages 39 – 40.

Claims 62 – 66 and 68 – 70, as amended, in reference to the many teachings of the specification text and figures clearly illustrate that Applicant has established possession of the claimed invention, utility of the claimed invention, described how to use the claimed invention, and distinctly claimed the invention.

### **Claim Rejections Under - 35 USC § 103**

Claims 62, 68 – 70 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over the applicant’s admitted prior art (AAPA) in view of Burd “Systems Architecture”. Applicant traverses the rejections of Claims 62 and 68 – 70 because the cited references do not teach, suggest, or render obvious, the features recited in claims.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combine references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Regarding Claims 62 and 68 – 70, the Examiner asserts that a watchdog timer function for monitoring the health and operation of the controller and resource management system is AAPA disclosed on page 5. The Examiner is mistaken. Page 5 of the specification states, *inter alia*, “**Prior art watchdog timers are used for monitoring the health and operation of the processor** whereas **the present watchdog timer is used specifically for the purposes of monitoring the health and operation of the present invention controller and resource**

management system” (emphasis added). Therefore, it is clear that contrary to the Examiner’s assertion, AAPA does not disclose “a watchdog timer function for monitoring the health and operation of said controller and resource management system”.

Further regarding Claims 62 and 68 – 70, the Examiner concedes that AAPA does not teach “wherein said controller and resource management system is operatively and functionally independent of said plurality of communications computer system resources”; however, the Examiner quotes Burd as disclosing “wherein said controller and resource management system is operatively and functionally independent of said plurality of communications computer system resources” (at page 496). In reviewing the Burd reference, Applicant fails to see any such statement. The Examiner also quotes Burd (at page 496) as teaching that “the processor can be stand-alone entities or part of a group that cooperate to achieve a common purpose” (emphasis added). Burd (¶1 at page 496) teaches that “[a] process is a basic unit of executing software that is independently identified and managed by the operating system. A process can request and receive hardware resources and operating system services. Processes can be stand-alone entities or part of a group of processes that cooperate to achieve a common purpose. Processes can communicate with other processes executing on the same computer system or with processes executing on other computer systems” (emphasis added).

Applicant respectfully submits that Burd only describes a software process, which is entirely distinct from a processor. Burd further illuminates this point in the 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs of page 496, stating that “process creation is performed by a user through the operating-system command layer” and “[t]he operating system creates the process by allocating memory and other resources, loading the process executable code into memory, and creating a data structure to store information about the process.” Clearly the Burd “process” is not equivalent to a “processor”; therefore, the Examiner’s reliance upon Burd is misplaced. Burd does not teach, as recited in amended Claim 62 “wherein said controller and resource management system is implemented in electronic hardware that is physically separate and functionally independent of said processor” (emphasis added). Furthermore, upon closer inspection of the amended Claims 62 and 68 – 70, the distinctions between Burd and the

amended Claims 62 and 68 – 70 should become apparent to the Examiner.

In rejecting Claim 68, the Examiner neglected to cite any references that teach “wherein said controller and resource management system is electrically isolated from said plurality of computer resources, including at least said processor” (emphasis added). Therefore, the rejection of Claim 68 is respectfully traversed, since there are no cited references that teach or suggest “electrically isolated”.

For at least these reasons, Claims 62 and 68 – 70, as amended, should be allowed. The cited references do not teach, suggest, or render obvious, the features recited in claims. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, Claims 63 – 66 and 68, as amended, should be allowed because they depend from an allowable Claim 62, as amended.

Claims 63 – 67 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over the applicant’s admitted prior art (AAPA) and Burd “Systems Architecture” in view of Hanzlik et al. (US pub. 2004/0044891). As previously stated, Claim 67 has been cancelled. The Examiner relies upon Hanzlik for teaching “the computer system is a wireless communicating device such as a cellphone, a portable computer such as a hand-held personal digital assistant (PDA) or laptop personal computer, a personal computer, a communications server, and implemented in hardware or firmware.” Hanzlik, teaches a system and method for secure group communications in a virtual private group **network**, which is not analogous to a “controller and resource management system” as recited in the claims. Hanzlik contemplates a **network requiring multiple computers**, whereas Claim 62 from which Claims 63 – 66 depend, recites “**In a computer**” (emphasis added). Hanzlik is incapable of performing any useful function in a single computer, and requires multiple networked devices to operate as a virtual private group; therefore, Hanzlik is not an analogous reference.

Furthermore, the Examiner’s cited motivation to combine references teaches away from




the claims. The Examiner states that the motivation to combine “would have been because Hanzlik teaches that ‘The host unit is capable of supporting small devices, such as cell phones and PDA’s. A **software embodiment is also less expensive to produce**, because it does not require encryption hardware’ (see paragraph 0036)” (emphasis added). Claim 62, as amended from which Claims 63 – 66 depend, recites *inter alia* “wherein said controller and resource management system is implemented in electronic hardware that is physically separate and functionally independent of said processor” (emphasis added). Therefore any teaching in Hanzlik regarding a software embodiment is irrelevant with respect to Claims 63 – 66. Again, Claims 63 – 66, as amended, should be allowed because the cited references do not teach, suggest, or render obvious, the features recited in the claims, and the claims depend from an allowable Claim 62, as amended.

## CONCLUSION

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicant. Accordingly, reconsideration and allowance is requested. If the Examiner believes that a telephone conference with Applicant's agents and attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,  
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